Data-on-Demand -- Geographic Information System

U.S. Army Corps of Engineers

Presented by:
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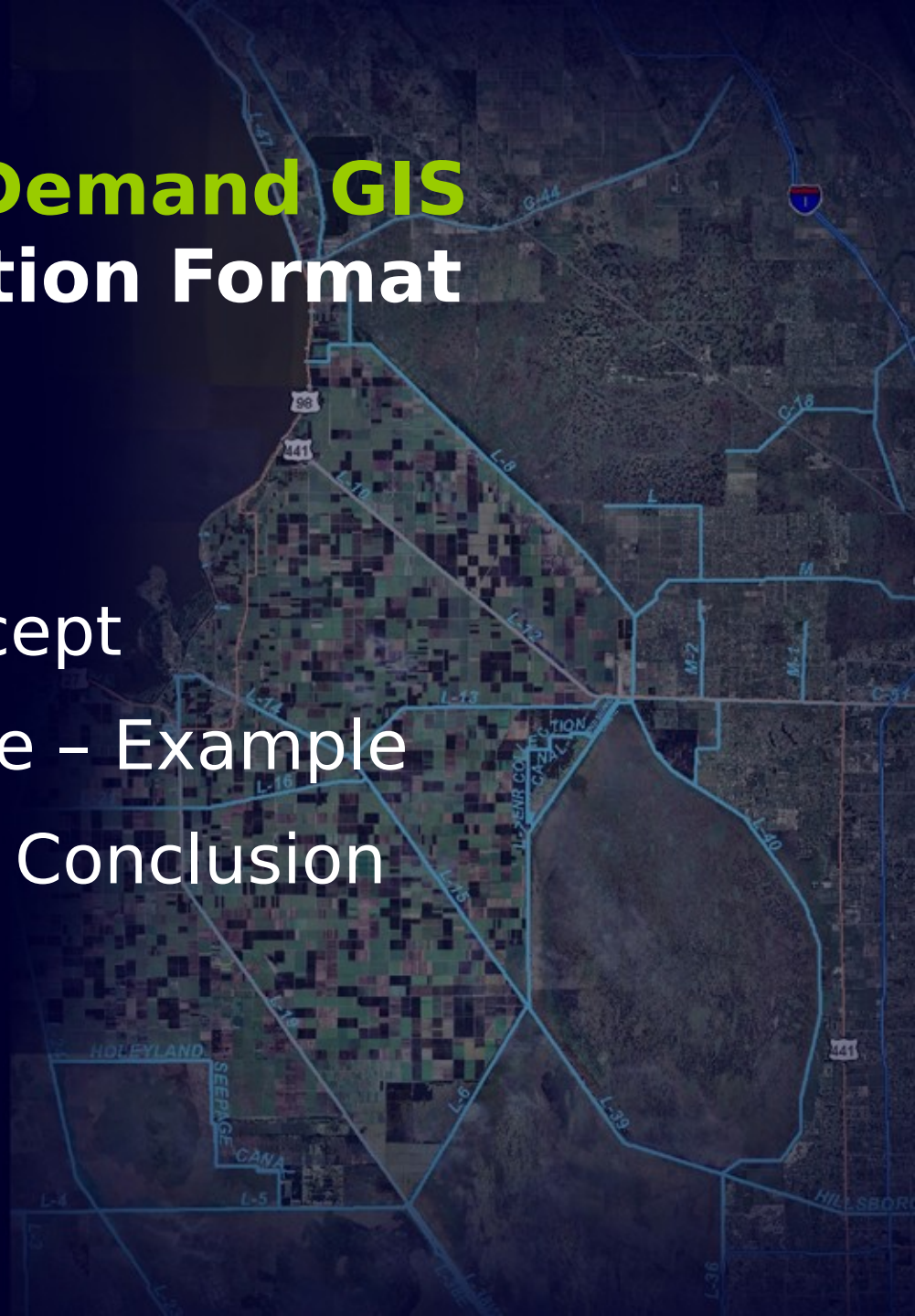
Jacksonville District

US Army Corps of Engineers
Jacksonville District

System-Wide Water Resources Program
SWWRP

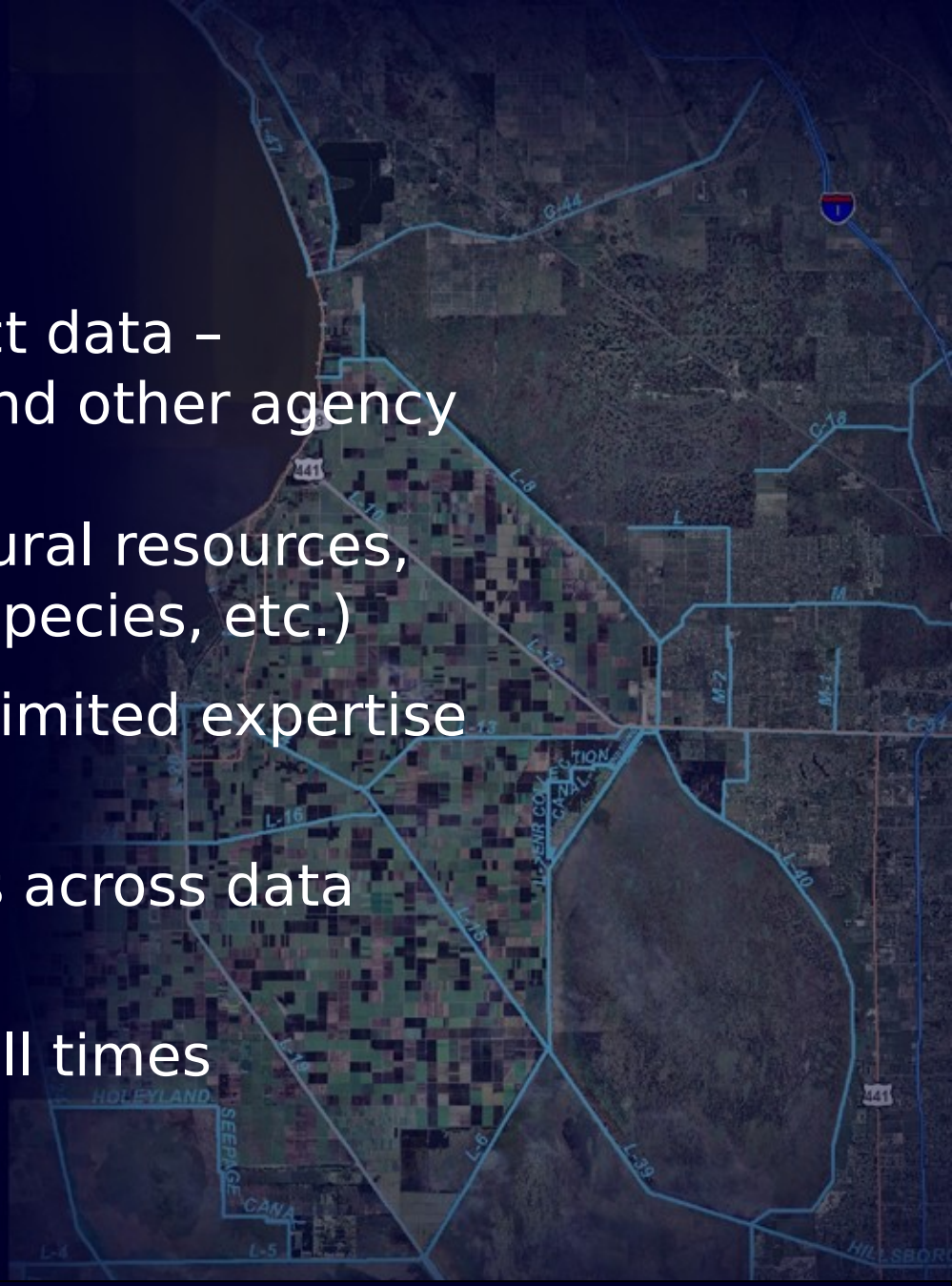
Data-on-Demand GIS
Presentation Format

- The Need
- System Concept
- WQ Prototype – Example
- Benefits and Conclusion

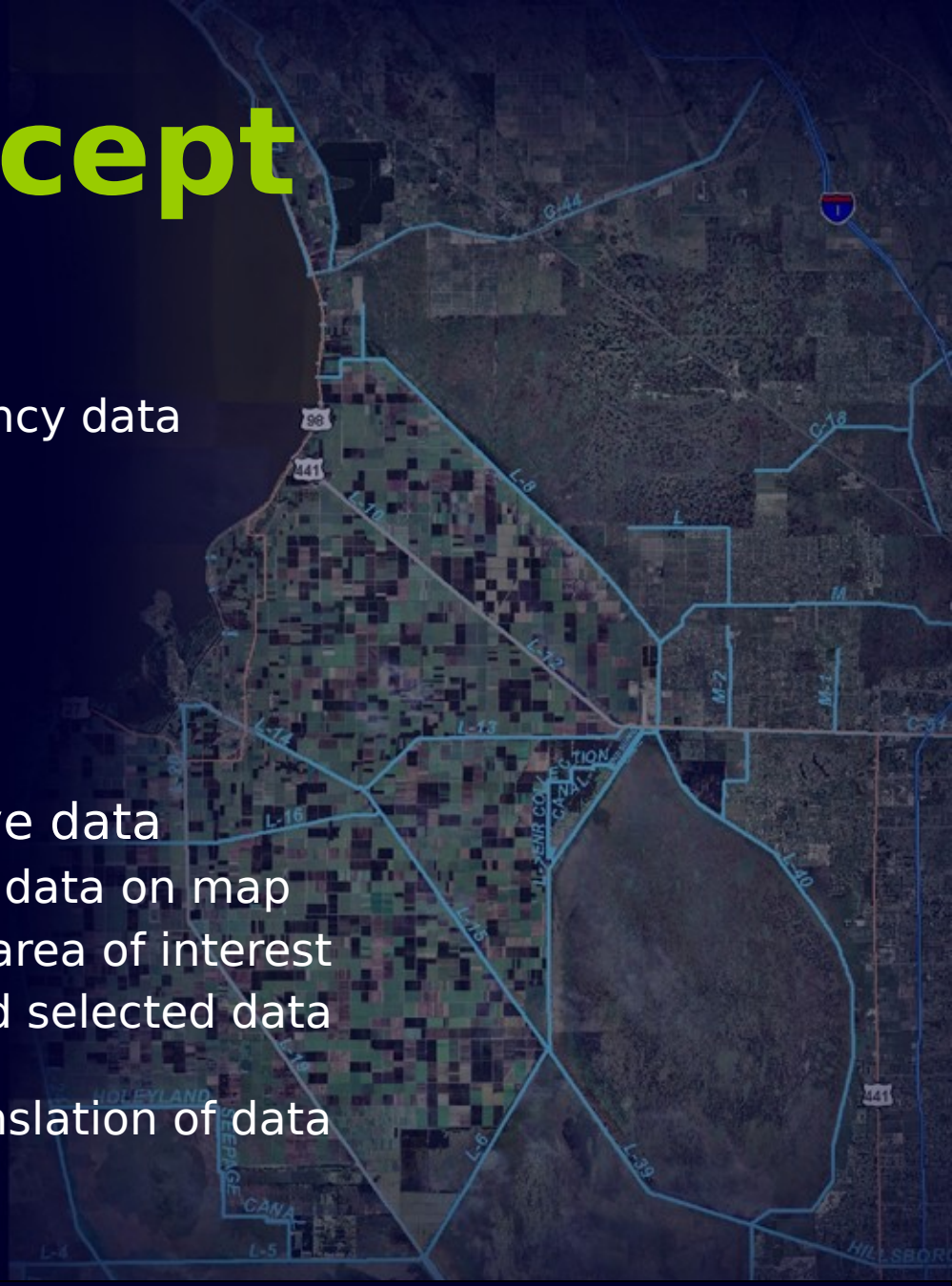


The Need

- Central access to project data – including Corps-wide and other agency data
  (e.g. water quality, cultural resources, wetlands, endangered species, etc.)
- A system that requires limited expertise in access protocols
- Consistent expectations across data types
- Fresh data required at all times



System Concept



- Retrieves Corps and other agency data

- Two access Mechanisms:
  - WEB
  - ArcGIS Toolbar Extension
  - Local Servers
- Uses web services to retrieve data
  - Displays Metadata as point data on map
  - Provides ability zoom in to area of interest
  - Provides ability to download selected data point directly from source
  - Limited processing and translation of data
  - Platform Independent

System-Wide Water SWWRP Resources Program

US Army Corps of Engineers
Jacksonville District

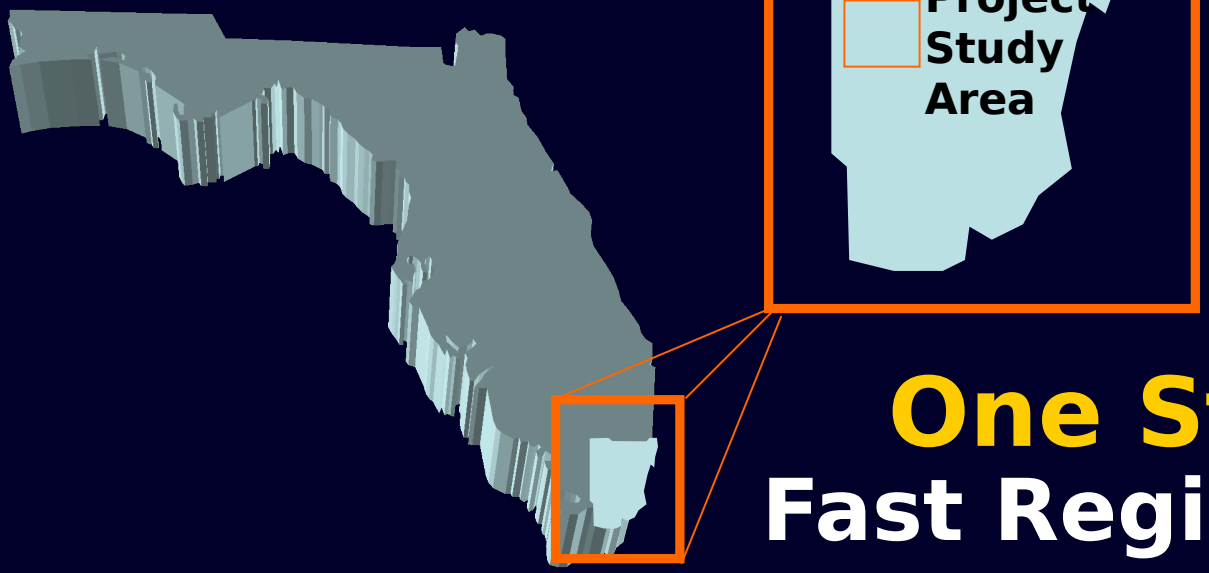
DBHYDRO: SFWMD
(West Palm Beach)

STORET: EPA
(Atlanta)

Any relevant data set
PROJECT HISTORY
Jacksonville Distric

HTRW: FDEP
(Tallahassee)

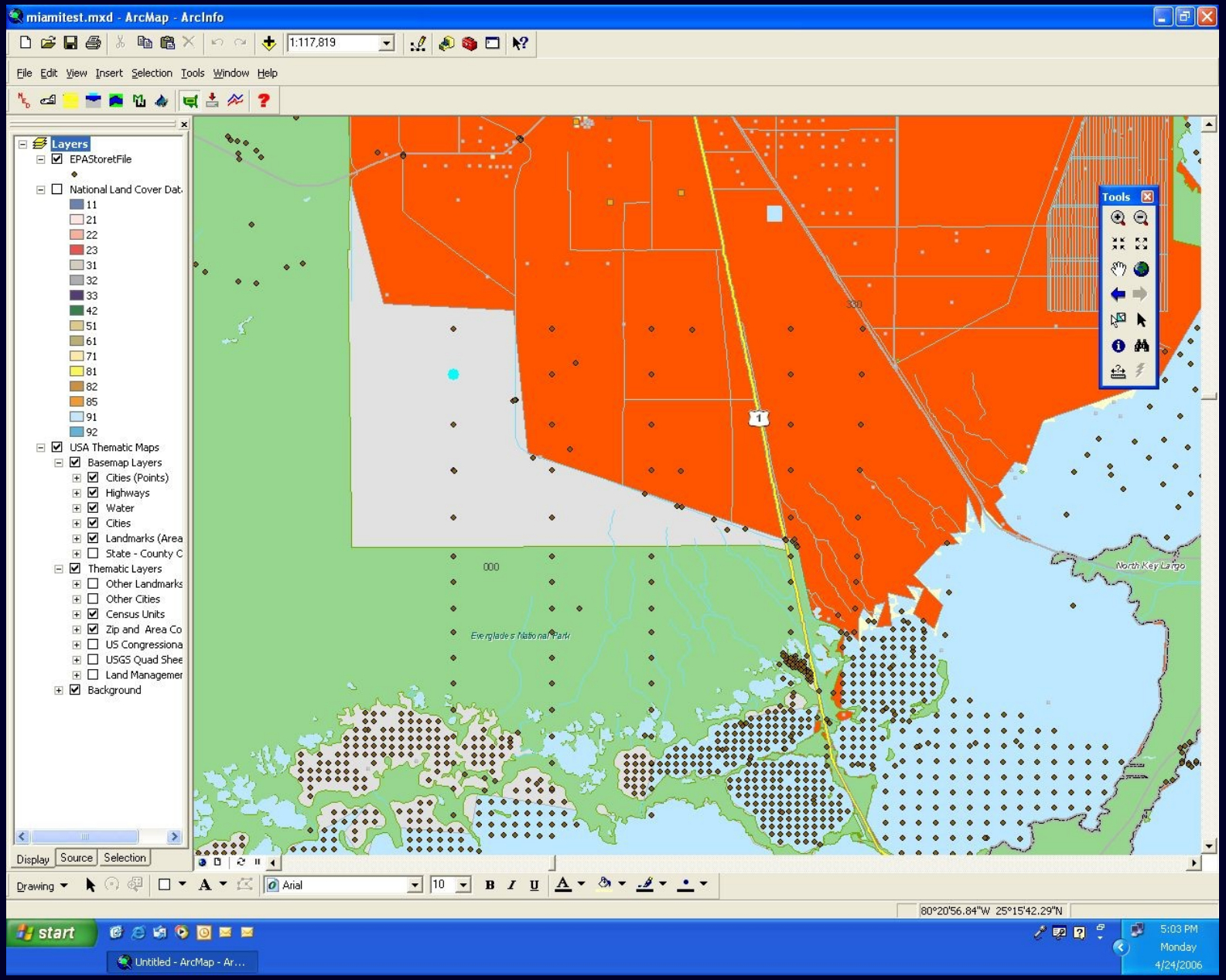
Virtual Integrated GIS Database



Independent data structures are reformatted into one consistent framework

One Stop Access

Fast Regional Project Data Access (Internet & Local Server)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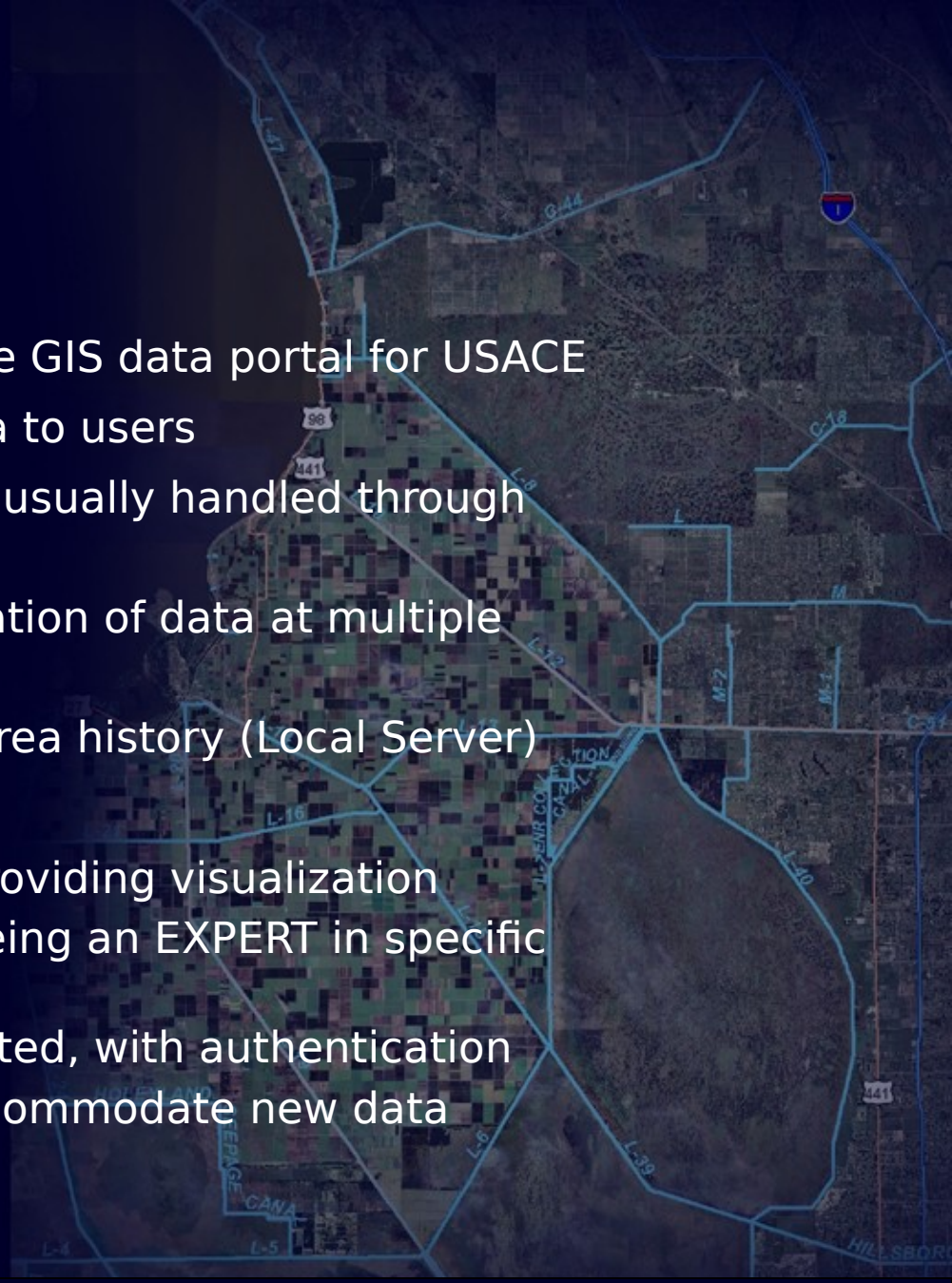
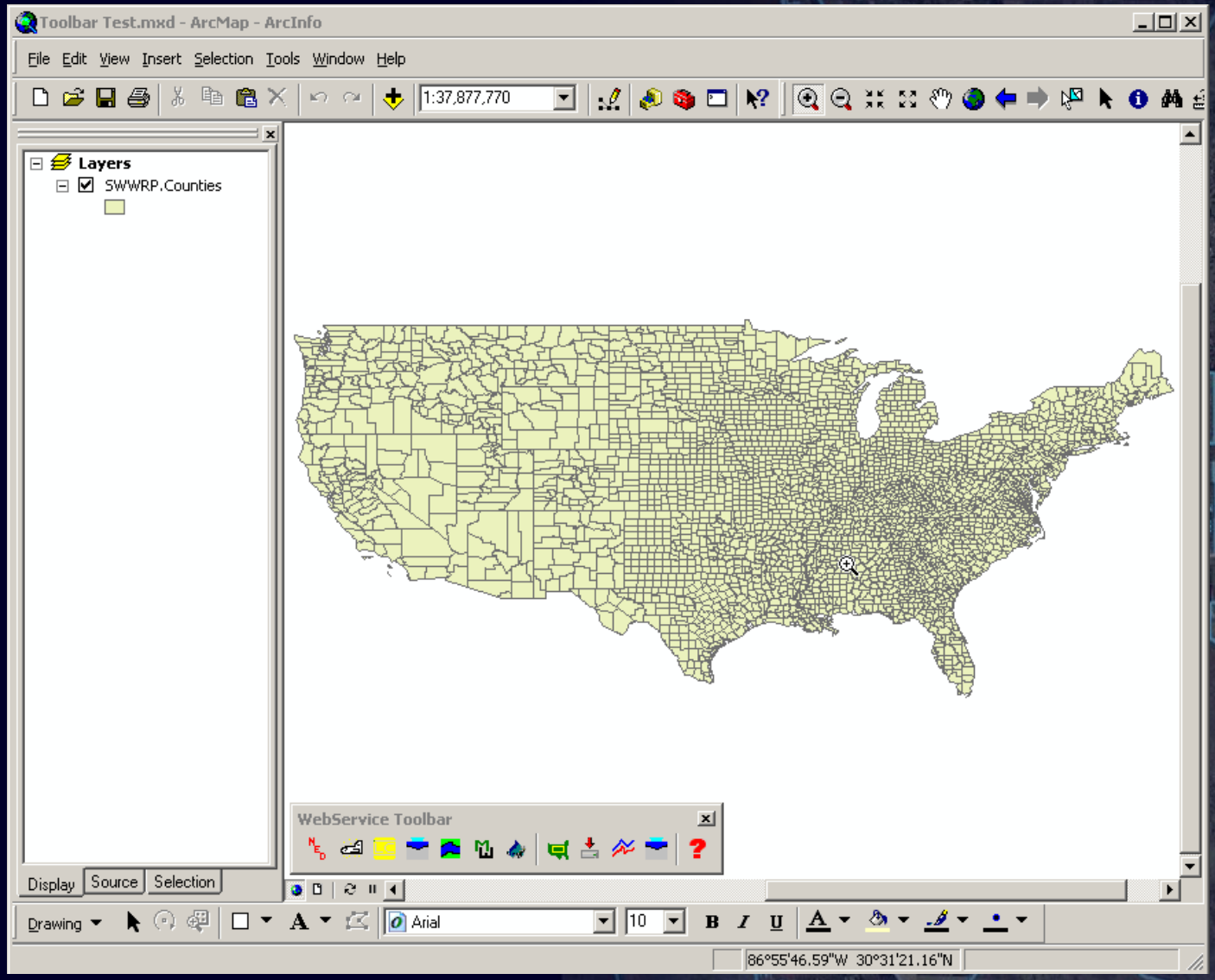
Benefits

- Provides a central clearinghouse GIS data portal for USACE
- Provides Freshest available data to users
- Minimal maintenance required (usually handled through upgrades)
- Prevents cost-prohibitive replication of data at multiple locations
- Streamlined access to project area history (Local Server)
- No additional cost to Districts
- Helps identifies data gaps by providing visualization
- Quick access to data without being an EXPERT in specific date retrieval
- Works through firewalls, encrypted, with authentication
- Built on a scalable model to accommodate new data sources





Data on demand GIS

Future

- Establish Service Level Agreements with Various Data Sources (EPA, NED etc.)
- Push Data Sources to provide more Metadata
- Add more data sources
- Limited Data Translation
- Regional Studies

Point of Contact

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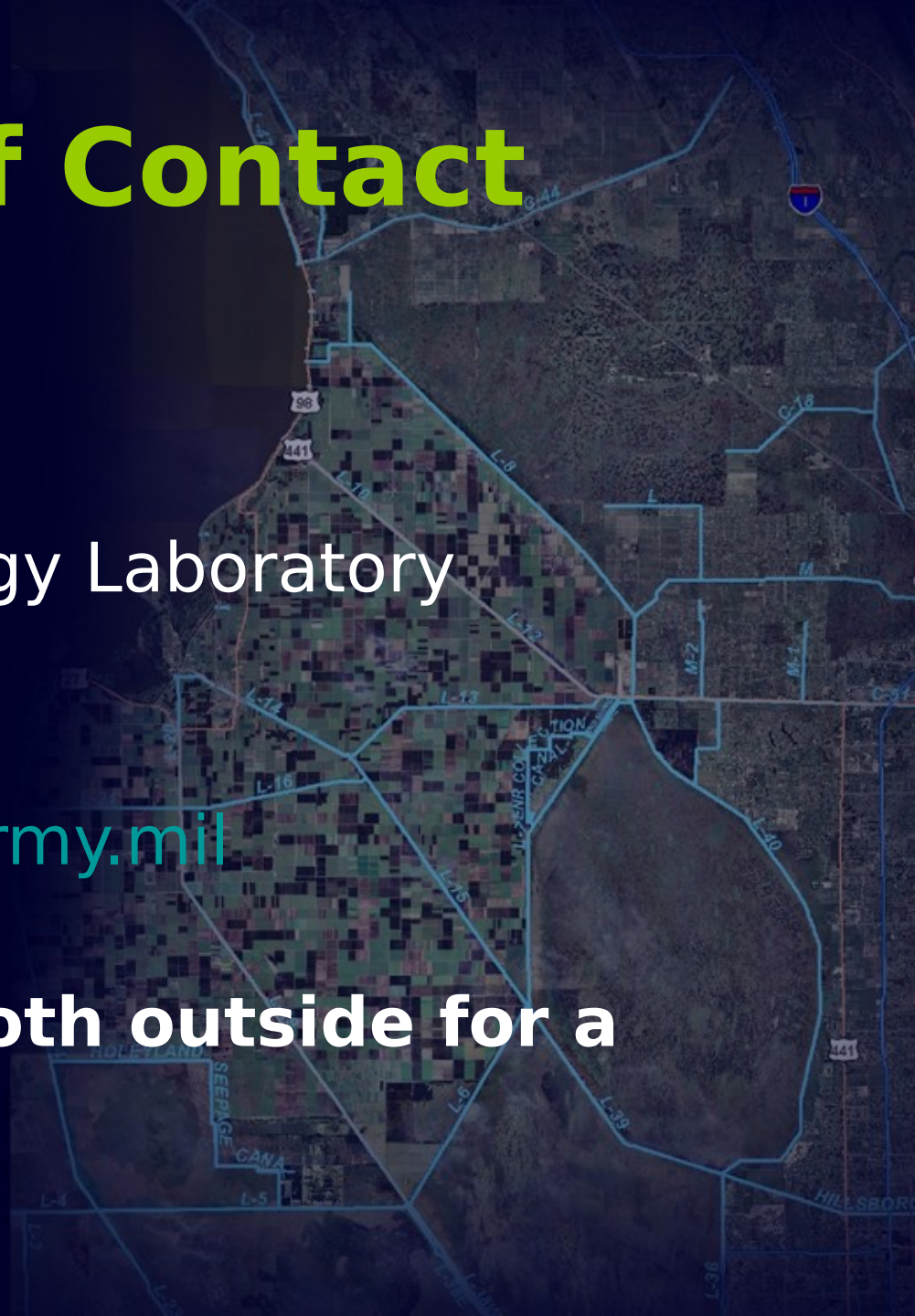

Conclusion

- A virtual database that can be located anywhere and can retrieve almost any data type specific to a certain geographic location/project area